No. 77-1101

In the Supreme Court of the United States

OCTOBER TERM, 1977

PAPPAS TELEVISION, INC., PETITIONER

v.

FEDERAL COMMUNICATIONS COMMISSION, ET AL.

ON PETITION FOR A WRIT OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE DISTRICT OF COLUMBIA CIRCUIT

BRIEF FOR THE FEDERAL RESPONDENTS IN OPPOSITION

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OPINIONS BELOW

The memorandum opinion of the court of appeals (Pet. App. 85–89) is unreported. The opinions of the Federal Communications Commission are reported at 48 F.C.C. 2d 116, reconsideration granted in part, 50 F.C.C. 2d 340 (Pet. App. 8–33); 57 F.C.C. 2d 134 (Pet. App. 34–52); 59 F.C.C. 2d 525 (Pet. App. 59–69); 61 F.C.C. 2d 1051 (Pet. App. 70–84).[1]

[1] The staff analysis of the Cooper Study was attached to the Commission's decision as an appendix, but was not reproduced in the FCC Reports and is not included in the Petitioner's Appendix. For the convenience of the Court, we reproduce it here. App., *infra*, 18A–38A.

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JURISDICTION

The judgment of the court of appeals (Pet. App. 86) was entered on October 25, 1977. The petition for a writ of certiorari was filed, in conformity with an extension of time granted by the Court, on February 6, 1978. This Court's jurisdiction is invoked under 28 U.S.C. 1254(1).

REGULATIONS INVOLVED

The pertinent provisions of the Federal Communications Commission's regulations for cable television are 47 C.F.R. 76.1, 76.5, 76.7, 76.51, 76.53, 76.54, 76.59, 76.61, 76.63, set forth in the appendix to this brief.

QUESTION PRESENTED

Whether the Commission in denying Pappas Television, Inc., special relief from the cable television carriage rules properly determined that Pappas' ability to serve the public would not be harmed by the importation of the signals of distant independent stations.

STATEMENT

1. The Federal Communications Commission in 1972 adopted rules governing the carriage by cable television systems of distant signals.[2] *Cable Television Report & Order,* 36 F.C.C. 2d 143, modified, 36 F.C.C. 2d 326 (1972); 47 C.F.R. Part 76. These rules were designed to accommodate two competing concerns. On the one hand, the Commission sought to protect local stations from any substantial loss of viewers in the cable television audience which might result if those viewers had access to too many distant stations. On the other hand, the Commission was anxious to permit cable systems to carry some out-of-town stations not otherwise available in the community, so as to attract subscribers and investors. See *Cable Television Report & Order, supra,* 36 F.C.C. 2d at 170–179.

Under the rules, the number of distant stations a cable system may carry depends generally on the size of the television market in which the system operates. Cable systems within the specified zone of "major markets"[3] are permitted under the rules to carry at least two distant stations. By contrast, cable systems located within the specific zone of a "smaller market" may not be entitled to any distant signals if the signals of each of the three networks and one independent station are available locally. 47 C.F.R. 76.5 (f), (h), (i), 76.53, 76.59 (App., *infra,* 2A, 6A–7A, 9A–13A).[4]

A broadcaster who seeks restrictions on cable systems beyond those provided in the 1972 rules must petition for special relief and show, with specific factual documentation, that the importation of distant stations will cause an audience loss that will so affect station advertising revenues as to impair its

[2] "Distant" signals are the television signals of stations that are located more than thirty-five miles from the cable system and are not received by any significant number of viewers in the area served by the cable system.

Until these rules were adopted the Commission had decided on a case-by-case basis how many distant stations would be carried on systems in each community. 36 F.C.C. 2d at 165.

[3] The 100 largest TV markets are designated "major markets."

[4] The 101st market and below are designated "smaller markets."

ability to operate in the public interest. See 36 F.C.C. 2d at 179, 186–187; Pet. App. 75, 80–81.

2. The petitioner, Pappas Television, Inc., operates television station KMPH in Tulare, California, a town defined by the Commission's rule as a smaller market. Its signal, however, reaches beyond Tulare. Pappas opposed the applications of five different cable systems outside its specified market zone. It contended generally that the cumulative impact of potential cable operations anywhere in the entire area covered by its signal would cause its station to lose audience and revenues, and, therefore, that no system in the area should be authorized to carry distant stations.[5]

The Commission rejected Pappas' contentions in the first two proceedings for failure to submit the required data showing harmful impact. *Fresno Cable TV Co., Inc.*, 48 F.C.C. 2d 116, reconsideration granted in part, 50 F.C.C. 2d 340, stay denied, 52 F.C.C. 2d 249; *Hanford Cable Co.*, 48 F.C.C. 2d 132, reconsideration granted in part, 50 F.C.C. 2d 351. Pappas then sub-

[5] Specifically, Pappas asked the Commission to ban distant independent stations on cable systems anywhere in the Fresno "area of dominant influence" (ADI). Pet. App. 76. This is a television advertising market defined by private audience rating services. Tulare, where Pappas' station is licensed, is in one of six counties that make up this sprawling market. The term "area of dominant influence" has significance for purposes of ratings and solicitation of advertising, but is not part of FCC's regulatory program. Thus, even though KMPH is located in the Fresno ADI, the FCC rules afford it the protection given stations located in smaller markets. Moreover, Pappas' station receives the additional benefit under the rules of being carried both on cable systems within the Tulare 35-mile zone and on systems outside the zone, but within the station's area of coverage. 47 C.F.R. 76.59 (a) (1), (6), 76.54; Pet. App. 74–75.

mitted a market analysis ("Cooper Study") in opposition to two later applications of Fresno area cable systems. Because the study did not concern the impact of any one system, but attempted to predict the impact of all potential cable development throughout the Fresno market, the FCC considered it in a separate market-wide special relief proceeding, in which all the systems participated. Pet. App. 40 n. 7, 62–63, 70–71.[6] The Cooper Study predicted that over the next ten years CATV systems would grow greatly, that, as a result, Pappas' profits would be less than they would be without CATV, and that the station therefore might not have the resources necessary to add a news department (Pet. App. 81, 83).

The Commission declined to grant special relief to Pappas. It found that the Cooper Study overestimated the potential growth of CATV in the area and, because of dubious methodology, quite likely also underestimated future earnings. In light of these defects in a study which nonetheless predicted "growing revenues, audiences and profits for KMPH with or without competition from distant independents," the Commission was not persuaded that the relief sought was needed to prevent loss of service to the public (Pet. App. 83).

Pappas sought review of this decision, as well as of the five decisions granting certificates to CATV systems in which the Commission had denied Pappas' opposition. The court of appeals consolidated the six

[6] Accordingly, it granted the challenged applications for certificates, reserving the question of impact for the special relief proceeding (Pet. App. 40 n. 7).

cases and, in an unpublished memorandum, affirmed (Pet. App. 85).[7] The court held that the record supported the FCC's conclusion that Pappas had not made out a case of economic injury sufficient to justify waiver of the rules (Pet. App. 89).

ARGUMENT

The decision of court of appeals is correct; the ruling does not conflict with any decisions of this Court or any other court of appeals; and it does not present any issue warranting further review.

1. Pappas' principal argument is that the Commission has unlawfully promoted the success of CATV "not as a function ancillary to its regulation of television broadcasting, but as a function separate and apart from that regulation" (Pet. 12, 9–12). More specifically, petitioner claims error in the Commission's supposed policy of requiring stations seeking special relief from the CATV rules to show both a risk of substantial injury and lack of harm to the cable system from the proposed relief (Pet. 9, quoting Pet. App. 88).

This contention is not properly presented by this case. Pappas never raised this argument below, and it should not be considered now. *Duignan* v. *United States,* 274 U.S. 195, 200. Moreover, even if the issue had been raised before the court of appeals it would have been irrelevant, for the Commission's opinion makes it clear that it denied relief solely because Pappas had not shown any risk of substantial injury

[7] The decision applies to six cases involving six Commission orders. Pappas does not seek review of two of the decisions in this Court (C.A. D.C., Nos. 75–1115, 75–1408). Pet. 3 n. 2.

(Pet. App. 80–81). The question of harm to the CATV system was not considered and was not part of the Commission's decision. The Commission's policy is to provide relief to any broadcaster who documents his claim of harm from proposed CATV carriage of distant signals. Harm to the CATV system is relevant only in shaping effective relief for the broadcaster in such a way as to minimize injury to the cable operator (Pet. App. 14–16). Such a policy is fair to both and is fully consonant with lawful CATV regulation as approved by this Court in *United States* v. *Southwestern Cable Co.,* 392 U.S. 157, and *United States* v. *Midwest Video Corp.,* 406 U.S. 649.

2. Petitioner's contention that the rejection of its claim for special relief discloses a lack of standards and is contrary to a decision of the First Circuit (Pet. 13–15) is insubstantial. The Commission's standards are sufficiently clear: the applicant for special relief must document a substantial risk that importation of distant signals will diminish his revenues to the point that his ability to serve the public is impaired. See *Cable Television Report, supra,* 36 F.C.C. 2d at 179; *Gerity Broadcasting Company,* 36 F.C.C. 2d 68 (1972); *Quincy Cablevision, Inc.,* 9 F.C.C. 2d 822 (1967). Of necessity, the amount and quality of proof which will meet this standard will vary from case to case. Here, applying the strict test applicable to all such objectors, the Commission found Pappas' submission unpersuasive. This is, of course, no basis for the charge that the Commission lacks a discernible standard.

Nor is the First Circuit's decision in *Colby-Bates-Bowdoin Educational Telecasting Corp.* v. *Federal Communications Commission*, 534 F. 2d 11 (C.A. 1), inconsistent with the decisions below. That case holds only that the Commission may not change standards without giving an adequate explanation—an issue not presented in this case at all.[8]

CONCLUSION

The petition for a writ of certiorari should be denied.

Respectfully submitted.

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April 1978.

[8] On a fresh appeal, after the Commission elaborated its reasons, the order in that case was affirmed. *Id.*, No. 77-1293, C.A. 1, decided March 15, 1978.

APPENDIX

EXCERPTS FROM THE COMMISSION'S CABLE TELEVISION RULES, 47 C.F.R., PART 76

§ 76.1 Purpose.

The rules and regulations set forth in this part provide for the certification of cable television systems and for their operation in conformity with standards for carriage of television broadcast signals, program exclusivity, cablecasting access channels, and related matters.

§ 76.5 Definitions.

(a) *Cable television system* (or CATV system). Any facility that, in whole or in part, receives directly or indirectly over the air and amplifies or otherwise modifies the signals transmitting programs broadcast by one or more television or radio stations and distributes such signals by wire or cable to subscribing members of the public who pay for such service, but such term shall not include (1) any such facility that serves fewer than 50 subscribers, or (2) any such facility that serves only the residents of one or more apartment dwellings under common ownership, control, or management, and commercial establishments located on the premises of such an apartment house.

NOTE: In general, each separate and distinct community or municipal entity (including unincorporated communities within unincorporated areas and single, discrete unincorporated areas)

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served by cable television facilities constitutes a separate cable television system, even if there is a single headend and identical ownership of facilities extending into several communities. See e.g., Telerama, Inc., 3 FCC 2d 585 (1966); Mission Cable TV, Inc., 4 FCC 2d 236 (1966).

* * * * *

(f) *Specified zone of a television broadcast station.* The area extending 35 air miles from the reference point in the community to which that station is licensed or authorized by the Commission. A list of reference points is contained in § 76.53. A television broadcast station that is authorized but not operating has a specified zone that terminates eighteen (18) months after the initial grant of its construction permit.

(g) *Major television market.* The specified zone of a commercial television station licensed to a community listed in § 76.51, or a combination of such specified zones where more than one community is listed.

(h) *Designated community in a major television market.* A community listed in § 76.51.

(i) *Smaller television market.* The specified zone of a commercial television station licensed to a community that is not listed in § 76.51.

* * * * *

(k) *Significantly viewed.* Viewed in other than cable television households as follows: (1) For a full or partial network station—a share of viewing hours of at least 3 percent (total week hours), and a net weekly circulation of at least 25 percent; and (2) for an independent station—a share of viewing hours of at least 2 percent (total week hours), and a net weekly circulation of at least 5 percent. See § 76.54.

NOTE: As used in this paragraph, "share of viewing hours" means the total hours that noncable television households viewed

the subject station during the week, expressed as a percentage of the total hours these households viewed all stations during the period, and "net weekly circulation" means the number of noncable television households that viewed the station for 5 minutes or more during the entire week, expressed as a percentage of the total noncable television households in the survey area.

* * * * *

(n) *Independent station.* A commercial television broadcast station that generally carries in prime time not more than 10 hours of programming per week offered by the three major national television networks.

* * * * *

(jj) *Local news program.* Local programming originated or produced by a station, or for the production of which the station is primarily responsible, employing live talent more than 50 percent of the time which includes reports dealing with current local events including weather and stock market reports.

(kk) *Specialty station.* A commercial television broadcast station that generally carries foreign-language, religious, and/or automated programming in one-third of the hours of an average broadcast week and one-third of weekly prime-time hours.

§ 76.7 Special relief.

(a) On petition by a cable television system, a franchising authority, an applicant, permittee, or licensee of a television broadcast, translator, or microwave relay station, or by any other interested person, the Commission may waive any provision of the rules relating to cable television systems, impose additional or different requirements, or issue a ruling on a complaint or disputed question.

(b) The petition may be submitted informally, by letter, but shall be accompanied by a certificate of

service on any cable television system, franchising authority, station licensee, permittee, or applicant, or other interested person who may be directly affected if the relief requested in the petition should be granted.

(c) (1) The petition shall state the relief requested and may contain alternative requests. It shall state fully and precisely all pertinent facts and considerations relied on to demonstrate the need for the relief requested and to support a determination that a grant of such relief would serve the public interest. Factual allegations shall be supported by affidavit of a person or persons with actual knowledge of the facts, and exhibits shall be verified by the person who prepares them.

(2) A petition for a ruling on a complaint or disputed question shall set forth all steps taken by the parties to resolve the problem, except where the only relief sought is a clarification or interpretation of the rules.

(3) If a petition involves more than one cable television community, three (3) copies of it should be filed for each such community, in addition to the number of copies otherwise required to be filed pursuant to § 1.51 of this chapter.

(d) Interested persons may submit comments or opposition to the petition within thirty (30) days after it has been filed. For good cause shown in the petition, the Commission may, by letter or telegram to known interested persons, specify a shorter time for such submissions. Comments or oppositions shall be served on petitioner and on all persons listed in petitioner's certificate of service, and shall contain a detailed full showing, supported by affidavit, of any facts or considerations relied on.

(e) The petitioner may file a reply to the comments or oppositions within twenty (20) days after their submission, which shall be served on all persons who have filed pleadings and shall also contain a detailed full showing, supported by affidavit, of any additional facts or considerations relied on. For good cause shown, the Commission may specify a shorter time for the filing of reply comments.

(f) The Commission, after consideration of the pleadings, may determine whether the public interest would be served by the grant, in whole or in part, or denial of the request, or may issue a ruling on the complaint or dispute. The Commission may specify other procedures, such as oral argument, evidentiary hearing, or further written submissions directed to particular aspects, as it deems appropriate. In the event that an evidentiary hearing is required, the Commission will determine, on the basis of the pleadings and such other procedures as it may specify, whether temporary relief should be afforded any party pending the hearing and the nature of any such temporary relief.

(g) Where a petition for waiver of the provisions of §§ 76.57(a), 76.59(a), 76.61(a), or 76.63(a), is filed within fifteen (15) days after a request for carriage, a cable television system need not carry the signal of the requesting station pending the Commission's ruling on the petition or on the question of temporary relief pending further proceedings.

(h) On a finding that the public interest so requires, the Commission may determine that a cable television system operating or proposing to operate in a community located outside of the 48 contiguous states shall comply with provisions of Subparts D, F, and G of this part in addition to the provisions

thereof otherwise applicable. In such instances, any additional signal carriage that is authorized shall be deemed to be pursuant to the appropriate provision of §§ 76.61(b) or 76.63(a) (as it relates to § 76.61(b).

(i) If the relief requested could have been earlier filed pursuant to § 76.27, the petition will be dismissed unless the petitioner shows at least one of the following:

(1) The facts relied on relate to events which have occurred or circumstances which have changed since the last opportunity to present such matters pursuant to § 76.27.

(2) The facts relied on were unknown to petitioner until after his last opportunity to present such matters, and he could not through the exercise of ordinary diligence have learned of the facts in question prior to such opportunity.

(3) Consideration of the facts relied on is required in the public interest.

SUBPART D—CARRIAGE OF TELEVISION BROADCAST SIGNALS

§ 76.51 Major television markets.

For purposes of the cable television rules, the following is a list of the major television markets and their designated communities:

* * * * *

(72) Fresno, Calif.

§ 76.53 Reference points.

To determine the boundaries of the major and smaller television markets (defined in § 76.5), the following list of reference points for communities having licensed television broadcast stations and/or outstanding construction permits shall be used. Where a community's reference point is not given, the geographic coordinates of the main post office in the community shall be used.

State and community	Latitude	Longitude
* * *	*	*
California:		
Bakersfield	35 22 31	119 01 16
Chico	39 44 07	121 49 57
Concord	37 58 46	122 01 51
Corona	33 52 35	117 33 56
El Centro	32 47 25	115 32 45
Eureka	40 48 08	124 09 46
Fontana	34 05 45	117 26 29
Fresno	36 44 12	119 47 11
Guasti	34 03 48	117 35 10
Hanford	36 19 51	119 38 48
Los Angeles	34 03 15	118 14 28
Modesto	37 38 26	120 59 44
Monterey	36 35 44	121 53 39
Oakland	37 48 03	122 15 54
Palm Springs	33 49 22	116 32 46
Redding	40 34 57	122 23 34
Sacramento	38 34 57	121 29 41
Salinas	36 40 24	121 30 25
San Bernardino	34 06 30	117 17 28
San Diego	32 42 53	117 09 21
San Francisco	37 46 39	122 24 40
San Jose	37 20 16	121 53 24
San Luis Obispo	35 16 49	120 39 34
San Mateo	37 34 08	122 19 16
Santa Barbara	34 25 18	119 41 55
Santa Maria	34 57 02	120 26 10
Stockton	37 57 30	121 17 16
Tulare	36 12 31	119 20 35
Ventura	34 16 47	119 17 22
Visalia	36 19 46	119 17 30

§ 76.54 Significantly viewed signals; method to be followed for special showings.

(a) Signals that are significantly viewed in a county (and thus are deemed to be significantly viewed within all communities within the county) are those that are listed in Appendix A of the memorandum opinion and order on reconsideration of the Cable Television Report and Order (Docket 18397 et. al.), FCC 72–530.

(b) Significant viewing in a cable television community for signals not shown as significantly viewed under paragraphs (a) or (d) of this section may be demonstrated by an independent professional audience survey of noncable television homes that covers at least two weekly periods separated by at least thirty (30) days but no more than one of which shall be a week between the months of April and September. If two surveys are taken, they shall include samples sufficient to assure that the combined surveys result in an average figure of at least one standard error above the required viewing level. If surveys are taken for more than 2-weekly periods in any 12 months, all such surveys must be submitted and the combined surveys must result in an average figure at least one standard error above the required viewing level.

(c) Notice of a survey to be made pursuant to paragraph (b) of this section shall be served on all licensees or permittees of television broadcast stations within whose predicted Grade B contour the cable community is located, in whole or in part, and on all cable systems, franchisees, and franchise applicants in the

cable community at least thirty (30) days prior to the initial survey period. Such notice shall include the name of the survey organization and a description of the procedures to be used. Objections to survey organizations or procedures shall be served on the party sponsoring the survey within twenty (20) days after receipt of such notice.

(d) Signals of television broadcast stations not encompassed by the surveys (for the periods May 1970, November 1970 and February/March 1971) used in establishing Appendix B of the *Memorandum Opinion and Order on Reconsideration of Cable Television Report and Order,* FCC 72–530, 36 FCC 2d 326 (1972), may be demonstrated as significantly viewed on a county-wide basis by independent professional audience surveys which cover three separate, consecutive four-week periods and are otherwise comparable to the surveys used in compiling the above-referenced Appendix B; *Provided, however,* That such demonstration shall be based upon audience survey data for the first three years of the subject station's broadcast operations.

§ 76.59 Provisions for smaller television markets.

A cable television system operating in a community located in whole or in part within a smaller television market, as defined in § 76.5, shall carry television broadcast signals only in accordance with the following provisions:

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(a) Any such cable television system may carry or, on request of the relevant station licensee or permittee, shall carry the signals of:

(1) Television broadcast stations within whose specified zone the community of the system is located, in whole or in part;

(2) Noncommercial educational television broadcast stations within whose Grade B contours the community of the system is located, in whole or in part;

(3) Commercial television broadcast stations licensed to communities in other smaller television markets, within whose Grade B contours the community of the system is located, in whole or in part;

(4) Television broadcast stations licensed to other communities which are generally considered to be part of the same smaller television market (Example: Burlington, Vt.—Plattsburg, N.Y., television market);

(5) Television translator stations with 100 watts or higher power serving the community of the system and, as to cable systems that commence operations or expand channel capacity after March 30, 1972, noncommercial educational translator stations with 5 watts or higher power serving the community of the system. In addition, any cable system may elect to carry the signal of any noncommercial educational translator station;

(6) Commercial television broadcast stations that are significantly viewed in the community of the system. See § 76.54.

(b) Any such cable television system may carry sufficient additional signals so that, including the signals required to be carried pursuant to paragraph (a) of this section, it can provide the signals of a full network station of each of the major national television networks, and of one independent television

station: *Provided, however,* That, in determining how many additional signals may be carried, any authorized but not operating television broadcast station that, if operational, would be required to be carried pursuant to paragraph (a)(1) of this section, shall be considered to be operational for a period terminating 18 months after grant of its initial construction permit.

(c) In addition to the noncommercial educational television broadcast signals carried pursuant to paragraph (a) of this section, any such cable television system may carry the signals of any noncommercial educational stations that are operated by an agency of the State within which the system is located. Such system may also carry any other noncommercial educational signals, in the absence of objections filed pursuant to § 76.7 by any local noncommercial educational station or State or local educational television authority.

(d) In addition to the television broadcast signals carried pursuant to paragraphs (a) through (c) of this section, any such cable television system may carry:

(1) Any specialty station and any station while it is broadcasting a foreign language, religious or automated program. Carriage of such selected programs shall be only for the duration of the programs and shall not require prior Commission notification or approval in the certificating process.

(2) Any television station broadcasting a network program that will not be carried by a station normally carried on the system. Carriage of such additional stations shall be only for the duration of the network programs not otherwise available, and shall not require prior Commission notification or approval in the certificating process.

(3) Any television broadcast station during the period from sign-off of the last television broadcast station which the cable television system must carry pursuant to § 76.59(a), or from 12:00 a.m. in the Central and Mountain Time Zones and 1:00 a.m. in the Eastern and Pacific Time Zones, whichever occurs first, to the sign-on of the first station which the cable television system must carry pursuant to § 76.59(a): *Provided, however,* That a cable television system may carry a program to its completion; *And provided further,* That this subsection does not authorize carriage in the manner described above whenever a television broadcast station that the cable television system must carry pursuant to § 76.59(a) broadcasts continuously and does not sign-off during the hours from 12:00 a.m. to 6:00 a.m. Carriage of such additional television signals shall not require prior approval in the certificating process and shall be consistent with the network nonduplication protection and syndicated exclusivity rules of Subpart F of this part.

(4) Any television station broadcasting a network news program at any time when no station regularly carried is broadcasting the same program and when no station licensed to the market in which the system is located is broadcasting a local news program. Carriage of such additional stations shall be for the duration of the news program only and shall not require prior Commission notification or approval in the certificating process.

(e) Where the community of a cable television system is wholly or partially within both one of the first 50 major television markets and a smaller television market, the carriage provisions for the first 50 major markets shall apply. Where the community of a system is wholly or partially within both one of the

second 50 major television markets and a smaller television market, the carriage provisions for the second 50 major markets shall apply.

§ 76.61 Provisions for first 50 major television markets.

A cable television system operating in a community located in whole or in part within one of the first 50 major television markets listed in § 76.61(a) shall carry television broadcast signals only in accordance with the following provisions:

(a) Any such cable television system may carry, or on request of the relevant station licensee or permittee, shall carry the signals of:

(1) Television broadcast stations within whose specified zone the community of the system is located in whole or in part: *Provided, however,* That where a cable television system is located in the designated community of a major television market, it shall not carry the signal of a television station licensed to a designated community in another major television market, unless the designated community in which the cable system is located is wholly within the specified zone (see § 76.5(f)) of the station, except as otherwise provided in this section;

(2) Noncommercial educational television broadcast stations within whose Grade B contours the community of the system is located, in whole or in part;

(3) Television translator stations with 100 watts or higher power serving the community of the system and, as to cable systems that commence operations or expand channel capacity after March 30, 1972, noncommercial educational translator stations with 5 watts or higher power serving the community of the system. In addition, any cable system may elect to

carry the signal of any noncommercial educational translator station;

(4) Television broadcast stations licensed to other designated communities of the same major television market (Example: Cincinnati, Ohio-Newport, Ky., television market);

(5) Commercial television broadcast stations that are significantly viewed in the community of the system. See § 76.54.

(b) Any such cable television system may carry sufficient additional signals so that, including the signals required to be carried pursuant to paragraph (a) of this section, it can provide the signals of a full network station of each of the major national television networks, and of three independent television stations: *Provided, however,* That in determining how many additional signals may be carried, any authorized but not operating television broadcast station that, if operational, would be required to be carried pursuant to paragraph (a)(1) of this section, shall be considered to be operational for a period terminating 18 months after grant of its initial construction permit.

(1) Whenever, pursuant to this section, a cable television system is permitted to carry three additional independent signals, one of these signals must be that of a UHF television broadcast station.

(2) Whenever, pursuant to Subpart F of this part, a cable television system is required to delete a television program on an independent signal carried pursuant to this section, or a program on such a signal is primarily of local interest to the distant community (e.g., a local news or public affairs program), such system may, consistent with the program exclusivity rules of Subpart F of this part, substitute a program from any other television broadcast station. A program substituted may be carried to its completion, and the cable system need not return to its regularly carried signal until it can do so without interrupting a program already in progress.

(c) After the service standards specified in paragraph (b) of this section have been satisfied, a cable television system may carry two additional independent television broadcast signals. *Provided, however,* That the number of additional signals permitted under this paragraph shall be reduced by the number of signals added to the system pursuant to paragraph (b) of this section.

(d) In addition to the noncommercial educational television broadcast signals carried pursuant to paragraph (a) of this section, any such cable television system may carry the signals of any noncommercial educational stations that are operated by an agency of the State within which the system is located. Such system may also carry any other noncommercial educational signals, in the absence of objection filed pursuant to § 76.7 by any local noncommercial educational station or State or local educational television authority.

(e) In addition to the television broadcast signals carried pursuant to paragraphs (a) through (d) of this section, any such cable television system may carry:

(1) Any specialty station and any station while it is broadcasting a foreign language, religious or automated program. Carriage of such selected programs shall be only for the duration of the programs and shall not require prior Commission notification or approval in the certificating process.

(2) Any television station broadcasting a network program that will not be carried by a station normally

carried on the system. Carriage of such additional stations shall be only for the duration of the network programs not otherwise available, and shall not require prior Commission notification or approval in the certificating process.

(3) Any television broadcast station during the period from sign-off of the last television broadcast station which the cable television system must carry pursuant to § 76.61(a), or from 12:00 a.m. in the Central and Mountain Time Zones and 1:00 a.m. in the Eastern and Pacific Time Zones, whichever occurs first, to the sign-on of the first station which the cable television system must carry pursuant to § 76.61(a); *Provided, however,* That a cable television system may carry a program to its completion; *And provided further,* That this subsection does not authorize carriage in the manner described above whenever a television broadcast station that the cable television system must carry pursuant to § 76.61(a) broadcasts continuously and does not sign-off during the hours from 12:00 a.m. to 6:00 a.m. Carriage of such additional television signals shall not require prior approval in the certificating process and shall be consistent with the network nonduplication protection and syndicated exclusivity rules of Subpart F of this part.

(4) Any television station broadcasting a network news program at any time when no station regularly carried is broadcasting the same program and when no station licensed to the market in which the system is located in broadcasting a local news program. Carriage of such additional stations shall be for the duration of the news program only and shall not require prior Commission notification or approval in the certificating process.

(f) Where the community of a cable television system is wholly or partially within both one of the first 50 major television markets and another television market, the provisions of this section shall apply.

§ 76.63 Provisions for second 50 major television markets.

(a) A cable television system operating in a community located in whole or in part within one of the second 50 major television markets listed in § 76.51 (b) shall carry television broadcast signals only in accordance with the provisions of § 76.61, except that in paragraph (b) of § 76.61, the number of additional independent television signals that may be carried is two (2).

(b) Where the community of a cable television system is wholly or partially within both one of the second 50 major television markets and one of the first 50 major television markets, the carriage provisions for the first 50 major markets shall apply. Where the community of a system is wholly or partially within both one of the second 50 major television markets and a smaller television market, the provisions of this section shall apply.

An Evaluation of the Cooper Study *

SUMMARY

Pappas Television, Inc. submitted the "Cooper Study" in its "Petition For Special Relief" against the importation of distant independent signals by cable television systems located within the Frenso, California Area of Dominant Influence (ADI). Thereafter, in rebuttal to the findings and conclusions reached in the "Cooper Study", Fresno Cable TV Co., Inc. submitted an analysis prepared by Edward Shafer, an economic consultant. In response to Mr. Shafer's analysis, Mr. Cooper submitted detailed comments (hereinafter "Cooper Study II"). A summary of the two Cooper studies and staff's evaluation of these studies follows:

PURPOSE OF COOPER STUDIES

The purpose of the Cooper Study is to estimate the degree of impact that cable television systems within the Fresno market, carrying two distant independent signals, will have on the total audience and revenues of the Tulare independent station (KMPH).

PREDICTIONS MADE IN THE COOPER STUDIES

Cable television penetration in the Fresno ADI will grow from the present level of 6% to between 45% and 55% in 1985 ("Cooper Study" p. 5.)

* This evaluation was prepared in connection with the Commission's ruling in *Pappas Television, Inc.*, FCC 76-953, — FCC 2d — (1976).

Averaged over the entire Fresno ADI, it is estimated that KMPH's CATV audience share would be 43% less than its non-CATV audience share in 1985. It is predicted that KMPH's non-CATV share of audience would increase from the present level of 9% to 13% in 1985. ("Cooper Study", p. 10.).

Cooper submitted two different estimates of revenue impact on KMPH. He originally predicted that the importation of two distant independent signals would cause KMPH's revenue to be 11.7% lower at 50% cable television penetration than if cable television were not allowed to carry any distant independent signals. This prediction was based on a direct relationship between "share of local audience" and "share of market revenue." ("Cooper Study", p. 12.). The second estimation for 1985 produced a table as follows:

Cable television penetration	Estimated KMPH			Percent revenue loss
	Share of local audience (percent)	Share of revenue (percent)	Revenue	
6 percent	13.7	18.15	$2,631,400	
50 percent	12.1	16.71	2,422,600	−7.9
60 percent	11.8	16.43	2,382,000	−9.5

This new estimate after a review of the earlier prediction was based on a finding that actually KMPH's share of revenue has been higher than its share of audience. ("Cooper Study II", p. 25.)

It is estimated that expenses will increase from the present $1,503,217 to $2,251,642 by 1985. At this rate, it is predicted that KMPH would have a profit of $379,758 with no importation of distant independent signals, $170,958 with 50% cable television penetration, and $130,358 with 60% cable television penetration. ("Cooper Study II", p. 27.)

Cooper estimates, that if KMPH elected to provide local news programming, the additional expense would be $346,248 by 1985. Although KMPH does not provide news service presently, Cooper predicts the station cannot earn a profit by 1985 if it elects to provide a local news program, unless the importation of distant signals is prohibited.

STAFF EVALUATION

There are major research errors in the Cooper study which invalidate the results. The FCC signal carriage rules are misinterpreted, which significantly inflates his prediction of impact. Cooper did not realize that CATV systems in nearly 20% (in population) of the Fresno ADI are prohibited by the FCC rules from carrying any distant independent signals. Throughout the study, Cooper fails to use acceptable statistical procedures normally used in economic projections. Many of his critical assumptions are not properly supported, if supported at all. Furthermore, his projections cannot be relied upon because they assume extreme conditions that are not likely to develop within the next ten years. A full discussion of Cooper's major predictions is in the text of this report. The following are some examples of weaknesses in the Cooper Study.

His use of the Bakersfield ADI in predicting future cable penetration for the Fresno ADI overlooks substantial dissimilarities between the two markets. Cooper limits the ADI research to Bakersfield, a market operated different from the Fresno market. Characteristics of the Fresno market such as the high percentage of rural population suggest that dramatic changes must occur before a 50% CATV penetration will be reached in the Fresno market.

Cooper's assumptions regarding the percentage of fractionalization of cable television viewing for KMPH in the Fresno ADI, are based solely on KMPH's non-CATV and CATV viewing in the Bakersfield market. Aside from the fact that the use of a single example is not a reliable statistical approach, there are several other reasons why Bakersfield is not a good example for estimating fractionalization in Fresno. The major reason is that the Bakersfiield ADI consists only of a portion of one county, contrasting significantly from the six counties in the Fresno ADI. Therefore, there are no adjustments for the varying degrees of KMPH's over-the-air signal quality within the larger Fresno ADI.

In the process of estimating revenues for KMPH in 1985, Cooper uses a "trend line" model to predict the total revenues of all television stations in the Fresno ADI. The statistical error of forecast for this model is extremely large which allows little confidence for the projected results. After total revenues are projected for the Fresno ADI, Cooper uses a table of revenue/audience ratios which relate KMPH's "share of local audience" to its "share of total market revenues." However, Cooper does not support the table of revenue/audience ratios with any data or analysis. Since there is no verification of this critical stage in his forecasting process, absolutely no reliance can be given to this model.

In summary, the Bureau staff finds no indication from this Cooper Study that KMPH represents a hardship case which warrants special waivers of the FCC signal carriage rules. Cooper's analysis predicts a CATV impact of —7.9% on WMPH's revenues by 1985, but this research methods are rudimentary and highly suspect. However, it is not disputed that

KMPH will soon be a profitable station with a secure audience base. Moreover, in view of the present low CATV penetration for that market and KMPH's growing audience, there is no apparent need for immediate relief.

Detailed Analysis of Cooper's Conclusions

1. A. Predicted 50 percent CATV penetration by 1985

Basis for Cooper's Predictions

Three guidelines are used by Cooper to estimate the percentage of households which might subscribe to CATV service in the Fresno ADI by 1985. A comparison with the Bakersfield ADI is used as one guideline because it is also served by three UHF network affiliates. Cooper notes that CATV penetration in the Bakersfield ADI reached 52% of the television households by Fall, 1974. A comparison with Porterville, a community located within the Fresno ADI, is used as another guideline. Cooper notes that after seven years of operation, the CATV system in Porterville achieved a 54.5% penetration level. As a third guideline, Cooper cites the Rand Corporation study entitled "Prospects for Cable in the Top 100 Markets." He interprets the Rand model to predict a range of 30% to 50% CATV penetration for markets with local and distant signal conditions similar to those which exist and are proposed for the Fresno vicinity. From these three guidelines, Cooper predicts that by 1985, CATV penetration within the Fresno ADI will be about 50% of the television households.

Staff evaluation

Cooper's reliance on a comparison with the Bakersfield ADI does not follow acceptable statistical proce-

dures normally used in economic projections. Similar and dissimilar characteristics of the Bakersfield and Fresno markets are not identified, other than to note that both are markets with all local stations having UHF channel assignments. There is no explanation for the present large difference in cable penetration of both markets. (6.3% in the Fresno ADI and 52% in the Bakersfield ADI). By limiting the ADI research to Bakersfield, statistical sampling theory is completely ignored. Other markets are not examined for similarity so that a statistical universe for such markets can be established and studied. In predicting a 50% CATV penetration level for the Fresno ADI by 1985, Cooper assumes an accelerated CATV growth nearly five times that experienced in this market since 1970.[1] Cooper gives no analysis which explains the reason or cause for this predicted dramatic upturn in CATV growth. Cooper used Porterville as an example showing that it is possible for a cable system to reach a 50% penetration level within seven years. A penetration level of 50% is common for communities the size of Porterville. However, the growth rate and penetration rate of a single community cannot be applied to an ADI as a whole, because many areas are not suitable for CATV.

Cooper misinterpreted the Rand Model by applying it to an entire market. The Rand Model, cited by Cooper, is designed to estimate consumer demand for cable television services, if a cable system were to exist in an individual community. Even if the Rand Model were to predict a 50% CATV penetration rate

[1] CATV penetration in the Fresno ADI has grown from .8% in 1970 to 6.3% in 1975.

for a given community, it should not be interpreted that a cable system would be economically feasible for that community. In order to estimate the economic feasibility of a cable system the Rand model must be used in conjunction with a cost model. The Comanar-Mitchell cost data implies that a cable system in a suburb cannot fall very short of fifty subscribers per mile of cable if it is to be a viable investment. This means a minimum population density of about 2,000 persons per square mile at 50 percent penetration, and of about 1,400 persons per square mile at 75 percent.[2] Thus, if the Rand model predicts a consumer demand for cable television service such that a 50% penetration level can be achieved for each community within an ADI, it does not mean that the entire ADI will have a 50% penetration level, because many areas will not be economically feasible for CATV. An [sic] Cooper indicated in his study[3], there are rural areas within the Fresno ADI which are not economically feasible for CATV.

The Bureau staff reviewed the Fresno ADI for characteristics which might explain its present low CATV penetration rate. The most obvious reason is that this area has a very large rural population which is not economically feasible for CATV. A breakdown of the counties in the Fresno market by the percentage rural population[4] follows:

[2] Roger G. Noll, Morton J. Peck, and John J. McGowan, *Economic Aspects of Television Regulation* (The Brookings Institution, Washington, D.C., 1973), pp. 159–160.

[3] Cooper Study, p. 6.

[4] The U.S. Bureau of Census defines urban areas to be places of 2,500 inhabitants or more incorporated as cities, villages, boroughs, and towns. *1970 Census of Population* (Volume I, Part A, Section 1), p. XII.

Fresno ADI

Counties	1960			1970		
	Total population	Rural population	Percent rural	Total population	Rural population	Percent rural
Fresno	365, 945	119, 702	33	413, 053	103, 182	25
Kings	49, 954	29, 137	59	64, 610	28, 416	44
Madera	40, 468	21, 513	53	41, 519	21, 126	51
Mariposa	5, 064	5, 064	100	6, 015	6, 015	100
Merced	90, 446	57, 788	64	104, 629	52, 357	50
Tulare	168, 403	94, 289	56	188, 322	86, 693	46

The above table illustrates that five out of six counties in the Fresno ADI are largely rural. This contrasts significantly from the Bakersfield ADI,[5] which was only 18% rural in 1970 and 22% rural in 1960. Furthermore, the city of Bakersfield and immediate suburbs account for 86% of the population within its ADI. Therefore, most of the cable television viewers within the ADI are subscribers of the two systems in the Bakersfield city vicinity. There are no predominant urban areas at the Bakersfield level within the Fresno ADI.[6]

This is not common for rural communities (of less than 2,500 persons) to have cable television in areas where all three network signals and one independent signal can be obtained off-the-air. Thus, it is not surprising to find that there is low cable television penetration in the Fresno ADI. A breakdown of the Fresno ADI showing cable penetration by county gives a better understanding of the present low number of CATV subscribers in this market.

[5] The Bakersfield ADI is very small, covering only a portion of one county. It consists of all census divisions of Kern County except for the East Kern and Tehachapi divisions.

[6] Fresno, the largest city within its ADI, comprises only twenty-one percent of the population.

Counties	1975 TVHH	1975 CATV HH	Percent CATV penetration	Percent urban population	CATV penetration of urban population
Fresno	143,900	0	----------	75	----------
Kings	20,500	858	4	56	7
Madera	14,200	0	----------	49	----------
Mariposa	2,700	318	12	0	----------
Merced	35,800	9,449	26	50	53
Tulare	63,900	6,570	11	54	19
Total	281,000	17,195	6	64	9

This table indicates that the cable television penetration is high for the urban areas of Merced and Tulare Counties. Because Mariposa and Madera counties are relatively small and rural counties, cable television is predictably small.

Fresno is the largest, most urbanized county in its ADI. However, cable television is not yet present in Fresno county. One reason for this is that there have been abnormal delays in the process of obtaining a franchise and a certificate of compliance for the city of Fresno. If we assume that these delays had not occurred, and if we assure [sic] further that the city were completely wired by cable and also 50% of the homes passed would subscribe to the service, the cable systems would have nearly 34,000 subscribers. This would increase the present CATV penetration to 18% of all television homes in the entire Fresno ADI.[7] Because a large portion of the remaining urban population in the Fresno ADI, consists of small towns, many additional cable systems would have to

[7] There are approximately 204,000 persons or 68,000 homes in the Fresno and Clovis metropolitan areas. By adding 34,000 subscribers to the existing 17,000 subscribers, the penetration would be eighteen percent for the ADI.

be built before a 50% cable penetration could be approached for the market as a whole.

There are many other factors to be considered in a forecast of ADI CATV penetration. If there are not yet any prospective franchisee's [sic] for many towns located within the ADI, the forecaster could investigate the reasons for this status so as to add reliability to his final prediction. The forecaster should consider that the process of obtaining a franchise agreement usually takes at least a year and often extends to several years. Once a franchise agreement is reached, a certificate of compliance must be obtained from the Federal Communications Commission. This process is also subject to delay depending upon the circumstances. In the Fresno ADI, there are 20 small towns (population 2,500 to 10,000) which do not have cable television and for which no application for a certificate of compliance has been filed. (See Appendix A).

Other factors to be considered in predicting cable television penetration are the cost, and the delays inherent in constructing a cable television system. Such delays often prevent a cable television system from reaching its full potential of subscribers until 3 to 5 years after construction begins. Furthermore, it is not always feasible to wire an entire town. For example, physical characteristics of the community or zoning codes may require that the distribution plant be underground. This may not be economically feasible for such areas.

Our analysis indicates a 50% cable penetration level is not considered as likely by 1985 unless dramatic changes occur within the market. The trend in urbanization would have to increase at a more rapid rate than in the past. Cooper noted tht the California State Department of Finance predicted the

market to be 69.3% urban areas by 1985.[8] This would require nearly a 70% penetration of urban penetration to reach a 50% penetration level for the entire ADI. Nearly every town would have to obtain a franchise agreement and certificate of compliance within at least the next 5 to 7 years to allow for the construction time to build each system. Every town would have to be completely wired even where underground construction is necessary or achieve a larger than 50% subscription rate of homes passed by cable. All these changes are not impossible. In fact the advent of new technologies and new services may increase penetration levels substantially in the near future. But it is impossible that all these events will occur within the next ten years, given the present evidence.

2. ESTIMATED CUMULATIVE IMPACT ON KMPH'S AUDIENCE

Basis for Cooper's Prediction

Cooper constructs a model to estimate the cumulative impact of cable television viewing on KMPH's total 9 AM to Midnight audience ratings. Aside from basing the model on a predicted 50% CATV penetration for the Fresno ADI by 1985, three other critical assumptions are made. One assumption is that the impact of two distant independent signals being carried by CATV, along with the other distant signals, would cause KMPH's CATV audience share to be 43% lower than its non-CATV audience share. This 43% impact estimation is based on the CATV and non-CATV viewing of KMPH in the Bakersfield ADI. Another assumption is that the CATV systems within the Fresno ADI will import an average of two strong, distant independent signals. He bases this conclusion on the premise that all CATV systems will carry the maximum number of signals allowable by the FCC rules. The third assumption is that KMPH will have a 13% share of the non-CATV audience in the Fresno ADI by 1985. This audience share prediction is based on the present audience shares of three western independent stations that have been in operation for at least fifteen years.

[8] Cooper Study, p. 6.

By using the above assumption, Cooper calculates the following as KMPH's share of audience by 1985.

[In percent]

	In non-CATV households	In CATV households
KMPH	13	7.4
Local network affiliates	77	62.5
Other local stations	5	2.9
Other outside stations	5	27.2
Total	100	100.0

Thus, according to Cooper, KMPH's share-of-audience based on all television households in the Fresno ADI would be 10.2%, which would be 21.5% lower than its non-CATV audience share.

Staff Evaluation

Cooper employs a unsophisticated design for his audience impact model. Although simple models are often used successfully in for short-run prediction, there are many complex, dynamic factors which influence the size of audience in any given television market over the long-run period of ten years. It is likely that a more elaborate model is needed for making reliable predictions of a selected television station's long-run audience. However, Cooper's model is also weak in areas other than its design. Cooper makes a number of serious research errors in the

process of arriving at each of his critical assumptions. These errors include poor sample selection, inadequate sample size, and misinterpretation of data.

Cooper bases the percentage of fractionalization of CATV viewing for KMPH in the Fresno ADI solely on KMPH's non-CATV and CATV viewing in the Bakersfield ADI. Using a single sample observation for a critical indicator is an extremely unreliable practice for forecasting. It inherently assumes, in this case, that television viewing is identical in every county within KMPH's signal range. Yet, Cooper provides no evidence that consistent viewing patterns throughout the Fresno ADI exist. There are several factors which may cause television viewing in each county to differ, affecting the percentage of fractionalization of KMPH's audience; factors such as the number and quality of signals received off-the-air and the number and type of signals carried by CATV.

The following illustration concerning the varying degrees of KMPH's signal quality over the counties within the Fresno ADI and the Bakersfield ADI, indicates that CATV may have a different impact on the station's audience depending on location. Kern County West (the Bakersfield ADI) is almost entirely inside KMPH's Grade A contour. In Kern County West, KMPH's off-the-air net weekly circulation is 31%, and its closest off-the-air independent competitior is KTLA, which receives a 6% off-the-air net weekly circulation. Mariposa, a small county within the Fresno ADI, is located almost entirely outside of KMPH's Grade B contour. In Mariposa county, KMPH receives an off-the-air net weekly circulation of only 5%, and its closest independent competitor is KTVU, which receives an off-the-air net weekly circulation of 35 percent. Since Mariposa receives such a poor signal from KMPH, it is conceivable that

CATV may increase KMPH's audience in that county.

The difference in signal carriage requirements for the markets also indicates that Bakersfield cannot be relied upon as an example by which to estimate the percentage of fractionalization of KMPH's audience in the Fresno ADI. The number of allowable independent signals for CATV carriage for the existing CATV systems in the Bakersfield ADI differ substantially from that which is allowable for prospective CATV systems in the majority of the Fresno ADI. The CATV systems in Bakersfield carry four strong, independent stations other than KMPH. The prospective CATV systems in most of the Fresno ADI will not be allowed to carry more than two distant independent signals. Cooper made an adjustment for this, but it is not verified. This further stresses the need for more observations of fractionalization.

Cooper's assumption, that CATV systems within the Fresno ADI will import an average of two strong, distant independent signals, is based on a misinterpretation of the maximum independent signals allowable by FCC rules. Cooper made the following approximations:

Area	Population Share of Fresno ADI (percent)	Allowable distant independent signals
Fresno 35 mile zone	68.4	2
Tulare 35 mile zone, not overlapped by Fresno 35 mile zone	18.9	1
Other areas within ADI, but outside Fresno and Tulare 35 mile zones	12.4	4

A simple weighted average indicates that two distant signals could be carried by CATV in the Fresno

ADI. However, since KMPH is a "must carry" signal in the Hanford and Tulare 35–mile zone (not overlapped by Fresno 35–mile zone) no other independent signal is allowed to be carried by CATV systems within those zones. Therefore Cooper did not realize that CATV systems in nearly 20% (in population) of the Fresno ADI are prohibited by FCC rules from carrying any distant independent signals.[9]

Cooper also failed to consider that many CATV systems do not carry the maximum allowable signals. As can be seen in the chart below many CATV systems in the Fresno ADI do not carry the maximum number of independent signals allowed by FCC rules.

CATV system	Number of independent signals carried	Number of independent signals allowed
Avenal	0	(1)
El Portal	1	(1)
Los Banos	3	(1)
Mariposa	0	(1)
Merced	3	(1)
Porterville	4	[2] 4
Three River	0	0
Woodlake	0	0

[1] Unlimited.
[2] Grandfathered.

NOTE.—This chart excludes the carriage of KMPH as a distant independent signal.

One reason that CATV systems do not carry the maximum allowable signals is that the signals are not available off-the-air. Therefore, the signals have to be brought in via common carrier. Many small systems cannot afford to pay the set rates of the common carrier, and therefore, do not carry as many signals

[9] There are no strong distant independent signals that are significantly viewed in those zones.

as allowed by the rules. Also, common carriers do not always carry enough signals to fill the maximum compliment of signals. In general, it is not uncommon for CATV systems to carry less than the maximum number of allowable independent signals.

Cooper's prediction that KMPH's audience share will be 13% by 1985, is based on the following chart:

On-air date	Leading independent	TV market	Share of audience 9 a.m. to midnight (percent)	Other independent stations on the air
1971	KMPH	Fresno-Visalia	9	KFTV 21, KAIL 53.
1968	KTXL	Sacramento-Stockton.	9	KMUV 31.
1958	KTVU	Oakland	12	KBHK 44, KEMO 20, KVOF 38.
1949	KPHO	Phoenix	16	KPAZ 21.
1952	KPTV	Portland	14	KVDO.

Cooper bases this estimate on the share of audience levels achieved by the older independent stations in this small table. He points out that this estimate is an "educated guess", and KMPH's share could be affected by increased competition from KFTV and KAIL.[10]

It must be stressed that Cooper's prediction, of a 13% share for KMPH by 1985, should only be considered as a gross approximation. There are many other factors which can affect KMPH's off-the-air audience share, such as KMPH increasing its signal strength or improving its program quality; or such as the additions of new independent signals overlapping the Fresno market from adjacent markets, or im-

[10] KAIL left the air April 17, 1973.

proved programming from local network stations. These factors can have a significant effect on increasing or decreasing KMPH's audience share in the Fresno market. Many of these factors already exist in other markets. The following table illustrates the wide range of audience shares obtained by mature independent stations.

Date operation began	Independent station	TV market	Channel	1976 9 a.m. to midnight share
1959	KPLR	St. Louis	11	10
1959	WVTV	Milwaukee	18	11
1952	KWGN	Denver	2	11
1967	WTCO	Atlanta	17	13
1949	WTTV	Indianapolis	4	15
1955	KTVT	Dallas	11	16
1953	WTCN–TV	Minneapolis	11	17
1967	KVVU–TV	Las Vegas	5	17

If Cooper were to expand his sample and use sophisticated statistical models, a more reliable prediction would be possible. Since Cooper relates revenue with share of audience, this assumption is a critical part of his analysis. If KMPH's off-the-air share of audience in 1985 becomes 12 or 14 instead of the predicted 13, according to Cooper's model, this would make a significant difference in the station's profit margin.

3. A PREDICTED 79 PERCENT IMPACT ON KMPH'S REVENUE

Basis for Cooper's Prediction

Cooper's methodology in predicting CATV impact on KMPH's revenue involves three stages. First, total television revenues of the Fresno ADI are forecasted

for 1985 by using the "trend line" mathematical method applied to the market's revenue trend for the eight year period, 1967 to 1974. The following trend is calculated:

Fresno total television revenue, 1967 to 1974, and projection to 1985

Calendar year:	*Fresno television revenue*
1967	$4,359,000
1968	4,741,000
1969	4,690,000
1970	4,794,000
1971	5,099,000
1972	6,965,000
1973	7,760,000
1974	8,346,000
1985	14,498,000

In the second stage, Cooper constructs a model which estimates ratios which relate "share of local audience" to "share of market revenue" for KMPH. This model assumes (no data is offered) that the revenue/audience ratios can be expected to decrease as the KMPH share of audience increases, as follows:

KMPH share of local audience	Revenue to audience share ratio	Estimated share of market revenue (percent)
7 percent	1.560:1	10.92
8 percent	1.525	12.20
9 percent	1.490	13.41
10 percent	1.455	14.55
11 percent	1.420	15.62
12 percent	1.385	16.62
13 percent	1.350	17.55
14 percent	1.315	18.41
15 percent	1.280	19.20
20 percent	1.105	22.10
23 percent	1.00:1	23.00

In the third step, Cooper uses the above model to estimate the KMPH share of revenue in 1985 for each of the share of audience estimates based on local stations only and using the 1985 market revenue estimate of $14,498,000, as follows:

CATV status	KMPH Share of (percent)		KMPH estimated revenue	KMPH estimated revenue loss	Percent revenue loss
	Audience	Revenue			
At status quo	13.7	18.15	$2,631,400		
50 percent CATV penetration	12.1	16.71	2,422,600	$−208,800	−7.9
60 percent CATV penetration	11.8	16.43	2,382,000	−249,400	−9.5

Staff Evaluation

Cooper estimates Fresno television market revenue by using a similar linear trend model. Simple extrapolation methods such as those used by Cooper are frequently the basis for making casual private forecasts of variables ranging from GNP to inventories of a single firm. Although these models can be useful as a way of quickly formulating initial forecasts, they usually provide little forecasting accuracy, because they simply assume that the dependent variable (revenue in this case) will increase in constant absolute amounts each time period. The analyst who estimates a simpler linear trend model is at least advised to calculate a standard error of forecast and forecast confidence interval following normal statistical procedures.[11] Cooper did not disclose the standard

[11] Robert S. Pindyck & Daniel L. Rubinfeld, *Economic Models and Economic Forecasts* (New York: McGraw Hill, 1976), pp. 421–518.

error of forecast and forecast confidence interval of his model, nor did he disclose the equation. However, by using his data points, the equation is easily derived as follows:

$$\text{Market Revenue} = 1{,}170{,}215{,}833 + 596{,}833 \times \text{Year}$$

The standard error of forecast for the predicted revenues of 1985 is $1,643,403. Therefore, for KMPH one can be reasonably confident (at the 95% confidence level) that the 1985 revenues for the Fresno television market will lie between $10,476,593 and $18,519,407.[12] The fact that the 95 percent prediction interval is so large suggests the limiting nature of the simple linear trend model. It ought not be relied upon for any policy decisions. A more sophisticated model (with additional explanatory variables) and more sample observations would most likely lead to a smaller forecast interval.

In the second stage, Cooper uses a table of revenue/audience ratios to estimate the KMPH share of

[12] A 95% confidence interval is placed around the predicted market revenue for 1985 using the standard formula

$$\hat{Y} \pm ts\left(1+\frac{1}{n}+\frac{(x_k-\bar{x})^2}{\sum(x_i-\bar{x})^2}\right)^{1/2}$$

In this case:

$\hat{Y}$ is the predicted revenue = $14,498,000
S is the standard error of estimate = 663,067
n is the number of observations = 8
x_k is the forecast year = 1985
$\bar{x}$ is the mean year = 1970.5
t is the t-statistic for 6 degrees of freedom and 95% level of confidence = 2.447

revenue in 1985. In using this table, he assumes that the ratio between revenue share and audience share decreases as KMPH's audience share increases. However, no analysis or data is offered to support this critical assumption. Therefore, there is no indication of its reliability, and it should be considered only as conjecture.

Cooper's method of relating "local audience share" to "local television revenue" in order to project revenues for KMPH wholly discounts a large part of KMPH's audience. KMPH is not assigned to the Fresno ADI nor any other ADI. Although KMPH receives most of its audience from the southern part of the Fresno ADI, it also receives a large audience share from the Bakersfield ADI.[13] For example, KMPH receives a share of 7 percent during the early fringe day-part in the Bakersfield ADI. This is a higher audience share than received by KJTV, a Bakersfield station. It is highly likely that KMPH is compensated for this audience. However, Cooper offers no evidence that KMPH is not now nor will in the future be compensated for its Bakersfield audience. It must be concluded that this model is not an adequate predictor.

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[13] KMPH receives 13% of its 9 AM to Midnight audience from the Bakersfield ADI.

Urban areas not holding or applying for a certificate of compliance

	Population
Fresno:	
Coalinga City	6,161
Kerman City	2,667
Kingsburg City	3,843
Orange Cove City	3,392
Reedley City	8,131
Sanger City	10,088
Selman City	7,459
Calwa	5,191
Kings:	
Corcoran City	5,249
Lemoore City	4,219
Lemoore Station	8,512
Merced:	
Winton	3,393
Livingston City	2,588
Tulare:	
Pinuba	7,917
Earlimart	3,080
Exeter City	4,475
Farmersville City	3,456
Lindsay City	5,206
Cutler	2,503
Orosi	2,757
Total	100,287

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